# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY ANNUAL FACILTY INSPECTION REPORT NPDES PERMIT FOR STORMWATER DISCHARGES FROM MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4)

MARCH 1, 2013 TO MARCH 1, 2014 REPORTING PERIOD

CITY OF WOODSTOCK, ILLINOIS

### A. BEST MANAGEMENT PRACTICES

No changes are proposed to the Best Management Practices (BMPs) described in the City of Woodstock's Notice of Intent (NOI).

## B. STATUS OF COMPLIANCE WITH PERMIT CONDITIONS

The City of Woodstock committed to a number of stormwater BMP's in order to meet the requirements of the NPDES Phase II stormwater program. The following is a status report on each of the BMPs and the activities that were undertaken during the March 1, 2013 to March 1, 2014 reporting period. The status or progress for each of the measurable goals related to these BMPs is presented below.

#### BMP No. A.1 Distributed Paper Material

The City Scene is a booklet that is mailed to all residents three (3) times per year. The City Managers Newsletter is a weekly publication that is available on the City's website. Each year, the City Scene or the City Manager's newsletter will include at least one article on topics such as: the impacts of stormwater discharges on water bodies; the steps that the public can take to reduce pollutants in stormwater runoff; the hazards associated with illegal discharges and improper disposal of waste; and green infrastructure.

**Measurable Goal(s), including frequencies:** Produce and include at least one article per year related to stormwater quality, pollution prevention and related items for the City Scene, the City Manager's Newsletter or the City's Website.

**Milestones: Year 6:** Produce and include at least one article for the City Scene, the City Manager's Newsletter or the City's Website.

**BMP Status:** In Year 6, the City Manager's Newsletter included an article entitled "Adopt-A-Highway" which described instructions and safety guidelines for this volunteer program which helps keep Woodstock's roadways clean.

Also published was an article entitled "Stormwater Pollution Control" which described regulations imposed on municipalities to implement a stormwater management program designed to reduce the discharge of pollutants into the storm sewer, an article entitled "Ten Things You Can Do To Minimize Stormwater Runoff Pollution and an article entitled "Proper Lawn Fertilization – Get A Soil Test". The City also distributes printed material on Water Conservation, Rain Garden Installation Guidelines, and Stormwater Drainage & Sump Pump Use to interested residents. These guidelines are displayed in the front lobby at Public Works.

#### BMP No. A.6 Other Public Education

The City marks storm drains to improve public awareness about improper discharges to the drainage system and to reduce the occurrence of these discharges.

**Measurable Goal(s), including frequencies:** The City's Public Improvement Standards require that all future storm drain castings include a warning against illegal dumping in storm drains. This requirement is enforced on all new development.

**Milestones: Year 6:** Complete one volunteer program to stencil storm drains.

**BMP Status:** In Year 6, no volunteer groups offered to stencil storm drains as part of the April 28, 2013 Senior Service Day. Two (2) phases of a residential development currently under construction are, however, installing storm castings warning against illegal dumping in storm drains.

#### **BMP No. B.7 Other Public Involvement**

The City promotes an adopt-a-highway program for interested local organizations to collect and remove trash and litter along public roadways which would otherwise be washed into the drainage system. Trash and litter are removed from each adopt-a-highway location 2-4 times per year, depending on the availability of the sponsor.

Measurable Goal(s), including frequencies: Provide materials and supplies to local sponsors for scheduled adopt-a-highway clean-up efforts and provide public information to promote new locations and opportunities. Annually inform residents of a telephone number for reporting stormwater related issues including: ordinance violations, construction site soil erosion and sediment control violations, maintenance issues and illicit discharges.

**Measurable Goals(s), including frequencies:** Publicize the telephone number using the City's website and in the City newsletter. Document the number of resident reports received annually.

**Milestones: Year 6:** Provide materials and clean-up support of designated adopt-a-highway programs. Post the telephone number on the City's website and in the City newsletter for reporting stormwater related issues.

**BPM Status:** The City had 23 adopt-a-highway projects in which a total of 120 garbage bags of debris were collected at various locations. The City collects data on "customer service request" forms regarding stormwater related questions and concerns. These service requests are kept in a GIS database for future reference once the request is addressed. The City continues to post the telephone number for questions or concerns regarding Stormwater Management, Benchmark information, Flood Plain and Flood Insurance, Rain Gardens, and Site Drainage and Sump Pumps on it the City's Website.

# BMP No.C.1 Storm Sewer Map Preparation

The City has a GIS-based storm sewer map for the entire storm sewer system, including the location of all known outfalls and the names of the waters that receive discharges from those outfalls. The City will work to complete annual updates of that record to correct errors, fill in missing information and add data from new construction.

Milestones: Year 5: Annual updates of the GIS database.

**<u>BMP Status:</u>** The storm sewer map was last updated in April 2012. No new storm sewer has been installed and accepted by the City for maintenance since 2012. Some additions to the storm sewer map are expected in late 2014 if construction continues as expected.

#### BMP No.C.3 Detection/Elimination Prioritization Plan

Title 4, Chapter 2.1 of the Woodstock City Code prohibits non-stormwater discharges into the storm sewer system. Title 1, Chapter 4.1 provides the appropriate enforcement procedures, actions and penalties for those who violate the ordinance. Outfall pipes within the City limits are inspected each year for evidence of non-stormwater discharges into the storm sewer system.

Measurable Goal(s), including frequencies: Prepared detailed location maps and inventory information in Year 1. Conduct and document annual site inspections for all identified outfalls.

**Milestones: Year 6:** Conduct and document annual inspection of outfalls.

**BMP Status:** The City Engineer inspected all of the storm sewer outfalls during dry periods between August and November of 2013. No signs of illicit discharges were noted.

#### BMP No. C.10 Other Illicit Discharge Controls

The City conducted a SSES field study during the summer of 2008 that included approximately 75% of the City. That study included sanitary sewer manhole inspections, smoke testing, dye testing and television inspection of both storm sewers and sanitary sewers. The City uses this study to locate and eliminate areas where pollutants can enter the storm sewer and where storm water can enter the sanitary sewer. The City also monitors water quality weekly by analyzing water samples taken from "Silver Creek", both upstream and downstream of the outlet from the North Wastewater Treatment Plant, in order to discover possible signs of illicit discharges.

**Measurable Goal(s), including frequencies:** To implement recommendations made in the SSES on an annual basis as the budget will allow and to continue weekly water quality sampling at our wastewater treatment plant.

**Milestones: Year 6:** Plan, schedule, and complete recommended storm and sanitary sewer improvements per the SSES field study in order to eliminate excessive infiltration and cross-connections.

**BMP Status:** The City located and eliminated one (1) cross connection in Year 6. Water quality sampling continued at the wastewater treatment plant and included measurements of water temperature (which varied between 34-74 degrees), P.H. (which varied between 7.6-8.2), ammonia nitrogen (which varied between 0.05-1.49), dissolved oxygen (which varied between 5.4-11.7), and BOD (which varied between 1-10). Samples showed that the temperature was higher downstream of the outlet in all 27 samples, P.H. was higher downstream of the outlet in 11 of the 27 samples, ammonia nitrogen was higher downstream of the outlet in 15 of the 27 samples and the B.O.D. was higher downstream of the outlet in 8 of the 25 samples.

# BMP No. D.1 Regulatory Control Program

The Woodstock Stormwater Ordinance, which mirrors the McHenry County Stormwater Management Ordinance, is the regulatory mechanism used to require erosion and sediment controls on construction sites.

**Measurable Goal(s), including frequencies:** Our goal is to revise the Woodstock Stormwater Ordinance when appropriate and necessary, based on revisions and changes made to the McHenry County Stormwater Ordinance. We continue to review and approve local stormwater permits and provide audit information to the County as requested.

**Milestones: Year 6:** The City will annually update our Stormwater Ordinance to remain in compliance with our status as a certified community. We keep documentation of all stormwater permits issued and soil erosion and sediment control reports submitted.

**BMP Status:** The City submitted the necessary documentation to the County in April 2012 in order to maintain our certified community status. The County's Stormwater Ordinance is in the process of being revised and the City will do so, as necessary, in order to maintain our certified status.

#### BMP No.D.4/D.6 Site Plan Review/Inspection/Enforcement Procedures

The City reviews proposed site grading plans for compliance with the Woodstock Stormwater Ordinance prior to issuing a construction permit. The Ordinance requires erosion and sediment control BMPs as well as control of construction debris. Ongoing projects are inspected by City staff as construction proceeds.

In addition, site inspections are performed in response to concerns raised by the public and while conducting routine building inspections. Issues involving lack of proper soil erosion measures or improperly maintained soil erosion measures are addressed promptly.

**Measurable Goal(s), including frequencies:** All new construction permit applications are evaluated at the time of permit issuance to make sure they comply with the requirements of the Stormwater Ordinance. The requirements of the Ordinance are followed and enforced during the review and construction process.

**Milestones: Year 6:** We want to continue to improve our evaluation process with regards to required soil erosion and sediment control measures during the initial plan review process. Erosion issues are addressed in a prompt manner.

**BMP Status:** The City issued 13 stormwater permits during the reporting period. Each permit submittal included a detailed review of the site plan prior to permit issuance.

#### **BMP No. E.5 Site Inspections during Construction**

The Woodstock Stormwater Ordinance, which is based upon the McHenry County Stormwater Ordinance, is the regulatory mechanism used to address post-construction runoff from new development and redevelopment projects. Ongoing projects are inspected regularly by the owner or owner's agent and inspection reports are submitted on a weekly basis to the City for review. The Department of Community and Economic Development and the Department of Public Works also inspect development sites periodically during construction and in response to complaints received from the public.

**Measurable Goal(s), including frequencies:** Perform weekly site visits and inspections, as well as site visits and inspections following rain events exceeding one-half inch.

**Milestones: Year 6:** Perform periodic site inspections to ensure installation and maintenance of soil erosion and sediment control measures.

**BMP Status:** During the reporting period, 88 construction site inspection reports were submitted for City review. Noted deficiencies are brought to the attention of the builder/developer and immediate corrective action is required.

#### BMP No. E.7 Other Post-Construction Runoff Controls

The City performs a cursory inspection of public stormwater detention facilities regularly. Privately owned stormwater detention facilities are not inspected on a regular basis by the City. Maintenance needs are communicated to the owners of private facilities, along with guidelines for performing maintenance, if a problem is noted.

Measurable Goal(s), including frequencies: Develop an inventory of privately owned stormwater facilities, prepare maintenance and upkeep guidelines for private property owners, distribute information to owners annually.

**Milestones: Year 6:** We have contacted some private property owners regarding maintenance issues. We have also discussed maintenance issues with various HOA's.

**BMP Status:** The City has developed an inventory of the public and private detention basins along with a form for documenting the results of each facility inspection. The City has discussed maintenance responsibilities with several private property owners and HOA's and have been unsuccessful in facilitating private maintenance on these basins. Private owners do not want to accept any responsibility and the City is considering various options to garner support without having to incur costly legal fees.

#### **BMP No. F.1 Employee Training Program**

The Public Works Department currently conducts a significant amount of employee training. Existing training includes the following: 3-6 months of on-the-job training with a senior employee, training on proper vehicle operation and maintenance, first response hazardous training, ladder safety, snowplow driver training, hand tool and chainsaw training, lock out/tag out training, tractor, mower, stump grinder safety training, blood borne pathogen training, MSDS product safety training, personal protective equipment training, etc. Training in stormwater management is received by attending seminars and workshops for select City staff members.

**Measurable Goal(s), including frequencies:** Annually conduct or require attendance at workshops focusing on topics such as dry weather observance, illicit discharge tracing, point source removal procedures, soil erosion and sediment control, stream bank stabilization and green infrastructure implementation. Document the date, topic and attendees for training purposes.

**Milestones: Year 6:** Select staff will receive relevant training at seminars and workshops.

**BMP Status:** On November 13, 2013 the City sent five (5) employees to "Snow Plow Safety Training" in McHenry, IL. for instruction on snow plow safety and reducing salt usage. On October 23, 2013, the City sent nine (9) employees to "Winter Snow and Ice Workshop" at MCDOT for additional instruction on reducing salt usage and pavement de-icing. The City Engineer attended a workshop entitled "Trees and Transportation" on October 12, 2013 in Schaumburg, Ill. for instruction on, among other things, how to reduce erosion and salt usage in areas where trees are planted in the public right-of-way.

# BMP No. F.2 Inspection and Maintenance Program

The City has many operational policies designed to prevent stormwater pollution associated with municipal operation. All fleet maintenance and washing is done in the Public Works garage. Floor drains are tributary to triple basin traps where oils, grease and sediments are removed prior to discharge into the sanitary sewer system. Road salt is stored in a covered shelter. Lubricants and oil spills resulting from equipment maintenance are cleaned up using oil absorbing compounds. Storm sewers are jetted, when required, and debris is removed from catch basins and inlets when noted. Streets and parking lots are swept at least twice per year covering approximately 124 centerline miles of streets each time.

**Measurable Goal(s), including frequencies:** Continue "good housekeeping" practices at all City facilities by inspecting and providing maintenance on all stormwater systems and keeping stormwater pollution out of storm sewer systems.

**Milestones: Year 6:** Perform fleet maintenance indoors. Keep all material piles covered. Continue to clean up spills by utilizing absorbent materials. Continue to sweep all streets at least twice per year while maintaining clean infrastructure, including storm pipes, inlets and catch basins and manholes.

**BMP Status:** During this reporting year, the Street Division cleaned 5,000 L.F. of storm sewer pipe. They replaced 260 L.F. of failed storm sewer and 6 roadside culverts. They removed debris from 450 L.F. of drainage ditches, repaired 42 catch basins and reconstructed 16 storm manholes. In addition, they collected just over 251 tons of street sweeping debris. All streets were swept three (3) times.

#### BMP No. F.3 Municipal Operations Stormwater Control

The City utilizes herbicide/fertilizer applications at Bates Park, Prairie Ridge Park, Davis Road Park and Merryman Fields Park each year to maintain control of noxious weeds and enhance the growth of new and existing turf.

**Measurable Goal(s), including frequencies:** The City performed soil testing at Bates Park, Prairie Ridge Park, Davis Road Park and Merryman Field Park in 2008 in order to determine the type and quantity of fertilizer needed at each location. The fertilizer type and application rates were matched to the specific soil conditions. We continue application annually in both the spring and fall.

**Milestones: Year 6:** Conduct soil tests at park sites when soil modifications (i.e. imports or exports) have occurred which would affect herbicide/fertilizer rates.

**BMP Status:** The City applied 500 lbs. of fertilizer in the spring and summer of 2013 on our fields.

We treated 9 parks, 3 public facilities and numerous baseball fields and soccer fields in May 2013. The City applied 33-0-3 fertilizer in May and 20-10-10 fertilizer in October. Care was taken to apply during optimal temperature/weather conditions and material was kept away from nearby detention ponds and low-lying areas.

# **BMP No. F.6 Other Municipal Operations Controls**

The City provides pet waste collection units in public parks to encourage proper disposal of pet waste.

Measurable Goal(s), including frequencies: Install and maintain pet waste receptacles and service receptacles on a regular basis.

**Milestones: Year 6:** Continue to provide and service pet waste facilities in major park sites.

**BMP Status:** The City provided pet waste facilities in Emricson Park, Tara Park, Birch Road Park and Banford Road Park. Each facility is cleaned and waste is removed twice/week. During the reporting year, 30,000 pet waste bags were utilized.

# C. <u>INFORMATION AND DATA COLLECTION RESULTS</u>

A brief summary of our monitoring data that was collected during the March 1, 2013 to March 1, 2014 reporting period was included in BMP No.C.10 (Other Illicit Discharge Controls). No other illicit discharges were noticed during the August/November 2013 inspection of the storm sewer outfall pipes.

# D. <u>SUMMARY OF NEXT REPORTING PERIOD STORMWATER ACTIVITIES</u>

The City plans to undertake the following activities during the March 1, 2014 to March 1, 2015 reporting period.

#### BMP No. A.1. Distributed Paper Material

**Measurable Goal(s), including frequencies:** Continue to produce and include at least one article per year related to stormwater quality, pollution prevention and related items for the City Scene, the City Manager's Newsletter or the City's Website.

**Milestones: Year 6:** Produce and include at least one article for the City Scene, the City Manager's Newsletter or the City's Website.

#### BMP No. A.6 Other Public Education

**Measurable Goal(s), including frequencies:** The City's Improvement Standards were revised to require that all future castings include a warning against illegal dumping in storm drains. This requirement is enforced on all new developments

**Milestones: Year 6:** Complete one volunteer program to stencil storm drains.

#### **BMP No. B.7 Other Public Involvement**

Measurable Goals(s), including frequencies: Provide materials and supplies to local sponsors for scheduled adopt-a-highway clean-up efforts and provide public information to promote new locations and opportunities. Annually inform residents of a telephone number for reporting stormwater related issues including: ordinance violations, construction site soil erosion and sediment control violations, maintenance issues and illicit discharges. Publicize the telephone number using the City's website and in City newsletters. Document the number of resident reports received annually.

**Milestones: Year 6:** Provide materials and clean-up support of designated adopt-a-highway programs. The City posted the telephone number for reporting stormwater related issues on the City website and in the City newsletter. Improve tracking the number of resident reports received regarding stormwater related issues.

#### BMP No. C.1 Storm Sewer Map Preparation

Measurable Goals(s), including frequencies: The GIS database has been compiled and the City will continue to perform annual updates of that data to correct errors, fill in missing data and add new data based on new construction.

**Milestones: Year 6:** Update GIS database as funding will allow.

#### BMP No. C.3 Detection/Elimination Prioritization Plan

Measurable Goal(s), including frequencies: Prepared detailed location maps and inventory information in Year 1. The City will conduct and document site inspection conditions for all identified storm sewer outfalls each year.

Milestones: Year 5: Conduct and document annual inspections of storm sewer outfall structures.

# BMP No. C.10 Other Illicit Discharge Controls

Measurable Goal(s), including frequencies: Annual implementation of 2009 SSES report recommendations.

Milestones: Year 6: Plan, schedule and complete recommended storm and sanitary sewer improvements.

# BMP No. D.1 Regulatory Control Program

Measurable Goal(s), including frequencies: Our goal is to revise the Woodstock Stormwater Ordinance when appropriate and necessary, based on changes made to the McHenry County Stormwater Ordinance. We continue to review and approve local stormwater permits and provide audit information to the County as requested.

**Milestones: Year 6:** Annual review of McHenry County Ordinance and documentation of all permits issued.

#### BMP No. D.4 Site Plan Review/Inspection/Enforcements Procedures

**Measurable Goal(s), including frequencies:** Evaluate all new construction at the time of permit issuance to ensure that it complies with the requirements of the Stormwater Ordinance. The requirements of the Ordinance are followed and enforced during the review and construction process.

**Milestones: Year 6:** We want to continue to improve on evaluating our soil erosion and sediment control measures as part of the plan review process.

#### BMP No. E.5 Site Inspections during Construction

**Measurable Goal(s), including frequencies:** Perform weekly site visits and inspections, as well as site visits and inspections following rain events exceeding one-half inch.

**Milestones: Year 6:** Perform periodic site inspections to ensure installation and maintenance of soil erosion and sediment control measures.

# BMP No. E.7 Other Post-Construction Runoff Controls

Measurable Goal(s), including frequencies: Develop an inventory of privately owned stormwater facilities, prepare maintenance and upkeep guidelines for private property owners, distribute information to owners annually.

Milestones: Year 6: Complete site visits and forward recommendations to owners annually.

## BMP No. F.1 Employee Training Program

**Measurable Goal(s), including frequencies:** Annually conduct or require attendance at workshops focusing on topics such as dry weather observance, illicit discharge tracing, point source removal procedures, soil erosion and sediment control, stream bank stabilization and green infrastructure implementation. Document the date, topic, and attendees for training purposes.

**Milestones: Year 6:** Select staff will receive relevant training at seminars and workshops.

#### BMP No. F.2 Inspection and Maintenance Program

**Measurable Goals(s), including frequencies:** Continue "good housekeeping" practices at all City facilities by inspecting and providing maintenance on all stormwater systems and keeping stormwater pollution out of storm sewer system.

**Milestones: Year 6:** Perform fleet maintenance indoors. Keep all material piles covered. Continue to clean up spills by utilizing absorbent materials. Continue to sweep all streets at least twice per year while maintaining clean infrastructure, including storm pipes, inlets, catch basins and manholes.

#### **BMP No. F.3 Municipal Operations Stormwater Controls**

**Measurable Goal(s), including frequencies:** The City performed soil testing at Bates Park, Prairie Ridge Park, Davis Road Park and Merryman Field Park in 2008 in order to determine the type and quantity of fertilizer needed at each location. The fertilizer type and application rates were matched to the specific soil conditions. We continue fertilizer application in both the spring and fall.

**Milestones: Year 6:** Conduct soil tests at park sites when soil modifications (i.e. imports or exports) have occurred which may affect herbicide/fertilizer rates.

## **BMP No. F.6 Other Municipal Operations Controls**

Measurable Goal(s), including frequencies: Install and maintain pet waste receptacles and service receptacles on a regular basis.

Milestones: Year 6: Continue to provide and service pet waste facilities in major park sites.

# E. NOTICE OF QUALIFYING LOCAL PROGRAM

The City of Woodstock is not relying on any other government entity to satisfy permit obligations.

# F. <u>CONSTRUCTION PROJECTS CONDUCTED DURING REPORTING PERIOD.</u>

For the period from March 1, 2013 to March 1, 2014, the City initiated and/or completed the following construction projects.

- Main Street utility improvements for movie theater expansion project.
- Safe Routes to School sidewalk project on Dean Street.
- Pedestrian walkway project for movie theater expansion project.
- Greenwood Avenue Storm Sewer Improvements